RCE date: September 20, 2010 Final Office Action date: March 19, 2010

II. Amendments to the Claims

The following listing of claims replaces all prior versions, and listings, of claims in the application. Material to be inserted is in **bold and underline**, and material to be deleted is in strikeout or (if the deletion is of five or fewer consecutive characters or would be difficult to see) in **double bold brackets** [[]].

Listing of the claims

- 1. (CURRENTLY CANCELED)
- 2. (CURRENTLY CANCELED)
- 3. (CURRENTLY CANCELED)
- 4. (PREVIOUSLY CANCELED)
- 5. (CURRENTLY CANCELED)
- 6. (Previously Canceled)
- 7. (CURRENTLY CANCELED)
- 8. (CURRENTLY CANCELED)
- 9. (CURRENTLY CANCELED)
- 10. (CURRENTLY CANCELED)
- 11. (CURRENTLY CANCELED)
- 12. (CURRENTLY AMENDED) A method of separating <u>immunoglobulin G</u>, [[a first]] <u>an</u> ionic protein compound of interest, from a <u>protein</u> sample having at least one additional different ionic protein compound using a selective cation-exchange adsorbent having a sufficiently low ionic charge density to ionically bind to the [[first]] ionic protein compound of interest, comprising the steps of:
- (a) contacting a <u>protein</u> sample <u>having containing immunoglobulin G and</u> at least two different first and a second <u>different</u> ionic protein compound[[s]] <u>consisting of protein A</u>, with a selective cation-exchange adsorbent <u>consisting of agarose beads having sulphopropyl</u> <u>groups attached thereto and having an ionic charge density from 10 to 100 μmol/ml;</u>
- (b) wherein the ionic charge density of the cation-exchange adsorbent is selected such that ionically binding the immunoglobulin G to the agarose beads having sulphopropyl groups attached thereto first ionic protein compound of interest binds to the cation exchange adsorbent and the second different ionic protein compound is unbound to the cation exchange adsorbent.

Attorney Docket No. MCA-609 US Application No. 10/521,730

RCE date: September 20, 2010 Final Office Action date: March 19, 2010

- [[(b)]] (c) washing the eation-exchange adsorbent agarose beads having sulphopropyl groups attached thereto with a buffered solution to remove [[the]] unbound protein A second different ionic protein compound, and
- [[(e)]] (d) applying a salt gradient of increasing conductivity to the eation exchange adsorbent agarose beads having sulphopropyl groups attached thereto, and
- (e) eluting the ionically bound first ionic protein compound of interest immunoglobulin G from the eation exchange adsorbent agarose beads having sulphopropyl groups attached thereto.
- 13. (CURRENTLY AMENDED) The method according to claim 12, wherein the <u>selective</u> cation-exchange adsorbent <u>consisting of agarose beads having sulphopropyl groups attached</u> thereto has an ionic charge density from 20 to 90 µmol/ml and comprises a sulphopropyl group.
- 14. (CURRENTLY AMENDED) The method according to claim 12, wherein the <u>selective</u> cation-exchange adsorbent <u>consisting of agarose beads having sulphopropyl groups attached</u> thereto has an ionic charge density from 30 to 80 µmol/ml agarose beads having sulphopropyl groups.
- 15. (CURRENTLY AMENDED) A method of separating a protein A component from an immunoglobulin G component in a sample component using a selective cation-exchange adsorbent having sulphopropyl groups, comprising the steps of:
- (a) contacting the sample component comprising protein A and immunoglobulin G components with a selective cation-exchange adsorbent having <u>sulphopropyl groups attached</u> thereto and an ionic charge density from 10 to 100 µmol/ml to ionically bind to the immunoglobulin G component, and
- (b) washing the selective cation-exchange adsorbent with a buffered solution to remove any unbound components.
- 16. (PREVIOUSLY AMENDED) The method according to claim 15, which further comprises
- (c) applying a salt gradient of increasing conductivity to the selective cation-exchange adsorbent, and eluting the bound immunoglobulin G component from the selective cation-exchange adsorbent.
- 17. (PREVIOUSLY CANCELED)
- 18. (PREVIOUSLY AMENDED) The method according to claim 15, wherein the selective cation-exchange adsorbent has an ionic charge density from 20 to 90 µmol/ml.

Attorney Docket No. MCA-609 US Application No. 10/521,730

RCE date: September 20, 2010 Final Office Action date: March 19, 2010

- 19. (CURRENTLY CANCELED)
- 20. (PREVIOUSLY CANCELED)
- 21. (New) The method according to claim 15, wherein the selective cation-exchange adsorbent has an ionic charge density from 30 to $80 \mu mol/ml$.
- 22. (New) The method according to claim 15, wherein the selective cation-exchange adsorbent comprises agarose beads.